

KANSAS CITY SOUTHERN, SCENIC HIGHWAY SITES SCOTLANDVILLE, LA

Three adjacent inactive & abandoned facilities located in the 7000 block of Scenic Highway in Scotlandville, Louisiana were investigated and/or remediated by Kansas City Southern Railway Company (KCS) in cooperation with the LDEQ RSD. These properties were owned by KCS, and had been historically leased to commercial operators. The operations conducted by the lessees on these sites had resulted in environmental contamination of the properties. All of the lessees had subsequently gone out of business, leaving KCS responsible for the remediation of the sites. The three properties are described separately below. Photographs of the properties in different stages of investigation/remediation follow the descriptions.

CHARLOTTE CHEMICAL SITE (AI #738)

The Charlotte Chemical Site was used for chemical manufacturing from 1982 to 1993. It was operated for this purpose by the Charlotte Chemical Company from 1982 to 1991, and then by the Onyx Chemical Company from 1991 to 1993, when the site became inactive. At that time, there were six settling ponds, 30 aboveground storage tanks, and several hundred drums remaining on site. KCS performed a source removal action between 1994-1995 that resulted in off-site disposal of all of the containers of wastes and unused products. The six settling ponds were remediated to background levels in 1996, and granted regulatory closure by the LDEQ in 1998. Although these actions mitigated the potential sources, concerns over potential soil and/or groundwater contamination remained.

These concerns were addressed by KCS by means of a site-wide investigation conducted in accordance with the requirements of the LDEQ RECAP Regulation. The LDEQ RSD requested this investigation in March 2002. TRC Environmental Solutions (the environmental contractor for KCS) conducted the initial sampling to perform this evaluation in June of 2002, under a LDEQ RSD approved site investigation work-plan.

The initial sample results indicated the need for further sampling to evaluate the potential for certain constituents to leach from the soil to groundwater, so more specialized samples were subsequently collected from certain locations to evaluate this possibility. All samples were collected under LDEQ oversight, and were sent to third-party analytical laboratories that were accredited under the Louisiana Environmental Laboratory Accreditation Program (LELAP).

The results of this site-wide investigation were submitted to the LDEQ in November 2002. This Site Investigation Report documented that all constituents of concern were below non-industrial (residential) standards established by RECAP, and eliminated the concern that soil constituents might leach to groundwater. Therefore, no corrective action was needed for the site, and all concerns over potential soil and/or groundwater contamination were addressed. Although the site was used for commercial/industrial purposes in the past, KCS wished to evaluate it against non-industrial standards to allow maximum flexibility in its potential re-development. Based on these findings, the LDEQ issued a NFA-ATT determination for the site in January 2003.



**Charlotte Chemical Site – Looking Southwest from the
Export Drum Site**

EXPORT DRUM SITE (AI #1128)

The Export Drum Site is located north of the Charlotte Chemical Site. It shared this physical address with the Western Petroleum Chemical Co. Site (see below), and historical information indicates these two operations shared a common office building and water treatment system. These two closely related operations were assigned the Agency Interest (AI) Number 1128 by the LDEQ.

The Export Drum portion of the property was previously used from the early 1950's until 1977 for drum recycling. The Export Transfer Company operated the facility until 1971 for this purpose. At that time the company name was changed to the Export Drum Company, which operated until 1977. The process employed involved collection of metal oil drums from area industries. These drums were emptied of any residual content, which was reclaimed for re-sale. These drums were then washed in a caustic solution, rinsed, tested, and re-painted. The wastewater from this cleaning process, was neutralized, treated by two oil water separators, and then discharged to the storm sewer system.

The site had previously been the subject of investigation by the landowner, Kansas City Southern (KCS), and the EPA Superfund Program. In 2002, KCS completed investigation and remediation of the site in accordance with a Cooperative Agreement between KCS and the LDEQ RSD, and various approved work-plans. The constituents of concern (COC) were Total Petroleum Hydrocarbons–Oil Range Organics (TPH-ORO), various Poly-cyclic Aromatic Hydrocarbons (PAHs), a Poly-Chlorinated Biphenyl (PCB, specifically Aroclor 1260), 4,4'-Dichlorodiphenyldichloroethylene (DDE), Chlordane, and Lead.

The RECAP evaluation of the historical site data indicated that there were fourteen (14) AOIs that had COC concentrations that exceeded the RECAP commercial/industrial standards. Additional sampling was conducted at these areas in April 2002, to verify the presence or absence of these COCs. Five (5) additional AOIs were investigated at this time as well. This gave a total of nineteen (19) AOIs under investigation. When a RECAP evaluation of this sample data was conducted, COC concentrations at fourteen

(14) of the AOIs were found to be below commercial/industrial standards. Five AOIs were found to require corrective action.

Groundwater was classified based on the sampling and aquifer testing conducted during the RECAP Site Investigation of the adjacent Western Petroleum Chemical Co. The results confirmed that the groundwater was classified under RECAP as Groundwater Three Non-Drinking Water (GW3NDW), and constituents of concern concentrations did not exceed RECAP standards for protection of groundwater of this classification.

Remedial actions taken between July and September 2002 included excavation and off-site disposal of affected soils and wastewaters at LDEQ permitted solid and hazardous waste treatment and disposal facilities. All wastes were removed from various containment structures, underground piping was excavated, and all impacted soils and sediment were excavated and removed for off-site disposal. Corrective actions were extensive in some areas. One example of this was the approximately 1,600 tons of contaminated sediment that was removed from the gravity settling ponds. Following corrective actions, confirmatory samples were taken under LDEQ oversight and analyzed by third-party LELAP Accredited laboratories. If the RECAP standards had been met, no further excavation was conducted, and usually backfilling of the AOI's was completed. If the confirmation sample results indicated that the RECAP standards were still exceeded, further excavation and confirmatory sampling was conducted until the standards had been achieved.



Export Drum Site – Oil/Water Separator (Before and After Clean-out)



Export Drum Site – Oil/Water Separator After Backfill



Export Drum Site – Caustic Pit (Before and During Clean-out)



Export Drum Site – Caustic Pit After Backfill

WESTERN PETROLEUM CHEMICAL SITE (AI #1128)

The Western Petroleum Chemical Site is located just north of the Export Drum Site. It shared its physical address with the Export Drum Site (as described above). The facility was used for oil recycling and operated by Petroleum Dehydrating Company from 1955-1961, and then operated by Western Petroleum Chemical Company from 1961-1984 for the same purpose. The process involved storing petroleum refinery wastes in heated above ground storage tanks for liquid separation. Water and oil were separated from the waste by this method, and the oil was decanted and sold or returned to the generator. Historical information also indicates that the facility conducted gravity separation in on-site ponds.

The Western Petroleum Chemical Site was closed in accordance with RECAP using commercial/industrial standards for certain AOIs on the property, and non-industrial (residential) standards for AOI-4. This mixed approach was taken by KCS to facilitate potential re-development of the property. Previous removal activities conducted in the late 1980's under LDEQ oversight had removed wastes and source materials from the site, leaving only soil contamination to be addressed. In 2002, the landowner, Kansas City Southern (KCS), completed remediation of these soils under LDEQ RSD oversight under the terms of a Cooperative Agreement (which also included Export Drum, see above), and in accordance with approved work-plans. The constituents of concern were Total Petroleum Hydrocarbons (TPHs) and associated semi-volatile TPH indicator compounds.

Remedial actions taken included excavation and off-site disposal of affected soils at a LDEQ permitted solid waste landfill. Groundwater was evaluated based on the sampling and aquifer testing conducted during the RECAP Site Investigation. The results confirmed that the groundwater was classified as Groundwater Three Non-Drinking Water (GW3NDW), and the COC concentrations did not exceed RECAP standards for this groundwater classification, so no remedial action for groundwater was required.

Following initial corrective actions, confirmatory samples were taken under LDEQ oversight and analyzed by third-party accredited laboratories. If the confirmation sample results indicated that the RECAP standards were still exceeded, further excavation and confirmatory sampling was conducted until the standards had been achieved.

Since remediation for both the Export Drum and portions of the Western Petroleum Chemical sites were conducted to RECAP commercial/industrial standards, the LDEQ required an institutional control in the form of a conveyance notice, which was filed by KCS with the East Baton Rouge Parish Clerk of Court's Office. This conveyance notice identifies affected soil areas that exceed non-industrial (residential) standards, and will warn future purchasers of the property about potential use restrictions. A Corrective Action Report that was submitted by KCS in September of 2002 documented the remedial actions. Based on this report, and other previously submitted information, the LDEQ issued a NFA-ATT determination for the site in October 2002.



Western Petroleum Chemical Site – AOI 1/2 Before and During Excavation